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10/021,129	12/12/2001	Yeong-Taeg Kim	SAM2.0004	2469

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EXAMINER	
NEWLIN, TIMOTHY R	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/021,129	KIM, YEONG-TAEG	
	Examiner	Art Unit	
	Timothy R. Newlin	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 April 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

With respect to claim 1, Applicant argues that Zigmond does not teach a digital TV function. To the contrary, Zigmond states that the programming feed may be transmitted in various formats, including digitally. E.g., col. 7 describes a satellite service, Internet video delivery, and encoded (i.e. digital) data. Digital data is also referred to with respect to Fig. 5: "advertisement repository [is] capable of storing digitally encoded video programming and later making the encoded programming available for display." **[col. 15, 28-31; also see col. 10, 4-15]**.

Further, Applicant argues that Zigmond does not block the ads and video display simultaneously because they are not contained in the same signal. The Examiner acknowledges that Zigmond teaches an interrupt function rather than simultaneous display; however, this line of argument is now moot with the addition of Kitsukawa to the §103 rejection, because Kitsukawa does in fact teach simultaneous display. Therefore, when the combined display taught by Kitsukawa is blocked according to the technique in Neel, the digital TV function would be blocked.

Applicant next asserts that Neel is relied upon to disclose the counting function. Actually, Zigmond teaches the counting function and disabling the display of an ad after a predetermined ("desired") number is reached **[col. 13, 40-47]**. Neel discloses additional blocking of the video feed to encourage participation in interactive advertising questions.

With respect to claim 2, Applicant disagrees that Zigmond teaches storing a new set of ads after an ad has reached its predetermined number of viewing times. Examiner stands by the rejection because Zigmond does teach storing ads for display, **[col. 4, 21-24]**, and as explained in the rejection, since ads continue to be displayed after a subset becomes blocked due to reaching a given display count, it follows that new ads are being stored which are then displayed (i.e. enabled).

Applicant argues that Zigmond fails to teach the limitations of claim 4 because it guarantees a minimum number of exposures instead of limiting to a given number. However, Zigmond teaches both a ceiling and a floor to the number of displays of a given ad **[ads are limited to prevent overexposure, col. 13, 40-47; advertisers can be guaranteed a minimum number of displays, col. 14, 49-58]**. Since ads are limited in exposure to some predetermined number, Zigmond will proceed to display subsequent stored ads when the limit for previous ads is reached.

Regarding claim 9, Applicant disputes the prior art status of Gupta. However, the subject matter of claim 9 is not entitled to the priority date of the provisional application because the limitations are not taught in that provisional specification. The provisional specification mentions a counter generally, but nowhere enables a technique of incrementing or decrementing the counter by an amount of time as claimed in claim 9. Support for those limitations is only found in the instant application and they are therefore only entitled to its filing date of 12/12/2001. Gupta was filed prior to that date and therefore is a valid prior art to that claim.

The Examiner believes that all pertinent arguments are addressed above; other remarks made in the response are moot in view of the new grounds of rejection that was necessitated by amendment.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1 – 4 and 6 – 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zigmond (U.S. 6,698,020) in view of Neel (U.S. 5,838,314), and further in view of Kitsukawa et al., US 6,282,713.

Considering claim 1, Zigmond discloses a method for operating a digital television receiver, which comprises:

providing a digital television receiver (fig. 3, el. 60; col. 7, lines 37-67) performing a Digital TV function (selecting and displaying advertisements—col. 7, lines 25-49) including receiving and outputting information (receiving a programming feed 52 and outputting it for display—col. 7, lines 25-49);

storing a plurality of advertisement messages in a storage device (fig. 5, elements 83 and 86; col. 15, lines 17-34; fig. 4, el. 62, col. 8, lines 1-11);

subsequent to storing the plurality of the advertisement messages, using the digital television receiver to receive video data from a digital television service provider for subsequent output with the advertisement using the Digital TV function of the digital television receiver (fig. 3, el. 66; col. 8, lines 29-38; col. 7, lines 1-25);

accessing the stored advertisement messages in the storage device (col. 15, lines 17-34);

with the digital television receiver, arranging (pre-screen and/or pre-filter—col. 15, lines 17-34) and outputting the plurality of the advertisement messages and the received video data (fig. 3, el. 58; col. 8, lines 29-38);

maintaining a count of the number of the plurality of the advertisement messages that has been output by the digital television receiver (col. 13, lines 40-47); and

Zigmond teaches a predetermined number of the plurality of the advertisement messages have been output by the digital television receiver (eg. 61 counts the number of times a viewer has seen a selected ad. Once the ad has been displayed the desired number of times, display of the advertisement to the viewer is blocked col. 13, lines 40-47), then disabling the digital TV function (in this case, disable the display of the advertisement to the viewer—col. 13, lines 40-47) of the digital television receiver, but is silent on determining whether the count reaches a predetermined number, then disabling the digital TV function of the digital television receiver.

In analogous art, Neel teaches determining whether the count reaches a predetermined number, then disabling the digital TV function of the digital television receiver in that Neel discloses providing content for free or at a reduced rate providing the user can respond to an interactive advertisement (see figure 5, col. 19, ll. 22-44). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Zigmond by determining whether the count reaches a predetermined number, then disabling the digital TV function of the digital television receiver as taught by Neel in order to gather more sales, marketing, and user data, while having an advertiser pay for video services (col. 6, ll. 18-33).

Zigmond also does not teach combining video and ad data to allow simultaneous viewing. Kitsukawa discloses combining ads and video data into a single signal and outputting the combined signal for simultaneous viewing of an ad and video data **[e.g. col. 6, 9-18; col. 7, 22-38; Fig. 5, col. 8, 17-36; Fig. 6, col. 9, 34-51]**. Zigmond itself provides a suggestion to base ad insertion on the content of the programming **[col. 4, 25-29]**. One of ordinary skill at the time of invention would have recognized the obvious benefit of modifying Zigmond with the teaching of Kitsukawa in order to more closely tailor advertisements to real-time video content. Kitsukawa improves Zigmond by allowing targeting based on specific segments or products displayed within a program rather than merely on the overall program.

Claim 9 also recites that a "total count" is maintained of ads that have been output. Zigmond only teaches a count of ads displayed to a given customer. However, Zigmond also teaches guaranteeing a number of exposures to an advertiser **[col. 14,**

53-55], which would require or at least suggests that a total count be maintained. Given these teachings, one of ordinary skill would readily see the utility of maintaining a total count in order to implement these functions. It would have been obvious that advertisers would be interested in a total count, rather than (or in addition to) merely a particular customer's exposure.

As to claim 2, Zigmond discloses that after the digital TV function has been disabled, such that video data from the digital television service provider are no longer output, storing a new set of the plurality of advertisement messages in the storage device (advertisements continue to be transmitted col. 8, lines 29-39, and new advertisements are stored after an advertisement has reached its desired number viewing times col. 13, lines 40-47); and subsequently enabling the digital TV function of the digital television receiver (ads that have not reached the desired number viewing counts proceed to be displayed col. 8, lines 29-39).

With regards to claim 3, Zigmond discloses performing the step of storing the new set of the plurality of the advertisement messages in the storage device by downloading the new set of the plurality of the advertisement messages from a network (fig. 8, el. 64; col. 8, lines 29-37).

Regarding claim 4, Zigmond discloses setting the predetermined number such that all of the plurality of the advertisement messages that were stored will be output (advertisers pay for a guaranteed number of exposures col. 14, lines 49-58).

Considering claim 6, Zigmond discloses providing the storage device as a component of the digital television receiver (fig. 5, el. 84; col. 15, lines 17-34; fig. 4, el. 62, col. 8, lines 1-11).

As to claim 7, Zigmond discloses performing the step of storing the plurality of the advertisement messages by downloading the plurality of the advertisement messages from a network (fig. 5, el. 84; col. 15, lines 17-34; fig. 4, el. 62, col. 8, lines 1-11).

With regards to claim 8, Zigmond discloses receiving additional video data from the digital television service provider; with the digital television receiver, outputting the additional video data without outputting the plurality of the advertisement messages (col. 18, line 38 to col. 19, line 9); and limiting a duration that the step of outputting the additional video without outputting the plurality of the advertisement messages can be performed (information relating to program description that appear in the feed. Since programs change, topics change and appear for a duration; col. 18, line 38 to col. 19, line 9).

2. Claims 5, 12, 13, and 15 rejected under 35 U.S.C. 103(a) as being unpatentable over Zigmond (U.S. 6,698,020) and Neel (U.S. 5,838,314) in view of Kitsukawa et al., US 6,282,713, and further in view of Knudson (U.S. 7,039,935).

Regarding claim 5, Zigmond teaches out putting the plurality of advertisement messages that were stored to be output (col. 15, lines 17-34; col. 18, lines 29-63). Zigmond fails to specifically teach a banner and performing the outputting step such that the plurality of advertisement messages that were stored are output as banner as advertisement messages together with the received video data.

Knudson teaches the use of advertising banners in conjunction with video (fig. 6, 7, 8, 12). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the advertisements of Zigmond and Neel with the banners as taught by Knudson in order to effectively convey both advertising information and video content to the user.

As to claim 12, Zigmond discloses a digital television receiver, comprising:

a receiving module (home entertainment system/household 56 in figure 3—column 6, lines 30-47) for receiving video bit streams (video programming feed 52 in figure 3) from a service provider (50 in figure 3 and column 7, lines 1-34);

a program selector for selecting a program (inherently disclosed in column 7, lines 26-49);

a video decoder for decoding received video bit streams of a selected program to obtain decoded video bit streams of the selected program (col. 6, lines 40-47);

an banner storage device (fig. 5, el. 86) for storing data representing advertisement messages and thereby obtaining stored data (fig. 5, el. 84; col. 15, lines 17-34; fig. 4, el. 62, col. 8, lines 1-11);

an banner rendering unit for decoding and rendering selected ones of the stored data to obtain rendered data (fig. 5, el. 84, 86, 83; [15, 16-34]; [12, 33-43]);

a counter module that is configured to maintain the number of advertisement messages read out from said banner storage device (el. 61 of figure 4 counts the number of times a viewer has seen a selected ad—col. 13, lines 40-47);

an ad manager unit for reading out the stored data from said banner storage device and for providing the stored data to said banner rendering unit, said banner manager unit checking the counter module and generating a disable signal when a predetermined number of the advertisement messages, represented by the stored data, have been read out from the banner storage device (el. 61 counts the number of times a viewer has seen a selected ad. Once the ad has been displayed the desired number of times, display of the advertisement to the viewer is blocked col. 13, lines 40-47; display of the advertisement to the viewer is blocked col. 13, lines 40-47); and

Zigmond teaches a predetermined number of the plurality of the advertisement messages have been output by the digital television receiver (eg. 61 counts the number of times a viewer has seen a selected ad. Once the ad has been displayed the desired number of times, display of the advertisement to the viewer is blocked col. 13, lines 40-

47), then disabling the digital TV function (in this case, disable the display of the advertisement to the viewer—col. 13, lines 40-47) of the digital television receiver, but is silent on determining whether the count reaches a predetermined number, then disabling the digital TV function of the digital television receiver.

In analogous art, Neel teaches determining whether the count reaches a predetermined number, then disabling the digital TV function of the digital television receiver in that Neel discloses providing content for free or at a reduced rate providing the user can respond to an interactive advertisement (see figure 5, col. 19, ll. 22-44). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Zigmond by determining whether the count reaches a predetermined number, then disabling the digital TV function of the digital television receiver as taught by Neel in order to gather more sales, marketing, and user data, while having an advertiser pay for video services (col. 6, ll. 18-33).

Zigmond and Neel are silent on banners. Knudson teaches the use of advertising banners in conjunction with video (fig. 6, 7, 8, 12). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the advertisements of Zigmond and Neel with the banners as taught by Knudson in order to effectively convey both advertising information and video content to the user.

Zigmond also does not teach combining video and ad data to allow simultaneous viewing. Kitsukawa discloses combining ads and video data into a single signal and outputting the combined signal for simultaneous viewing of an ad and video data **[e.g. col. 6, 9-18; col. 7, 22-38; Fig. 5, col. 8, 17-36; Fig. 6, col. 9, 34-51]**. Zigmond itself

provides a suggestion to base ad insertion on the content of the programming **[col. 4, 25-29]**. One of ordinary skill at the time of invention would have recognized the obvious benefit of modifying Zigmond with the teaching of Kitsukawa in order to more closely tailor advertisements to real-time video content. Kitsukawa improves Zigmond by allowing targeting based on specific segments or products displayed within a program rather than merely on the overall program.

Claim 12 also recites that a "total count" is maintained of ads that have been output. Zigmond only teaches a count of ads displayed to a given customer. However, Zigmond also teaches guaranteeing a number of exposures to an advertiser **[col. 14, 53-55]**, which would require or at least suggests that a total count be maintained. Given these teachings, one of ordinary skill would readily see the utility of maintaining a total count in order to implement these functions. It would have been obvious that advertisers would be interested in a total count, rather than (or in addition to) merely a particular customer's exposure.

As to claim 13, Zigmond discloses a system control unit for receiving the disable signal and, in response thereto, for prohibiting said output terminal from receiving the information representing the selected program (el. 61 counts the number of times a viewer has seen a selected ad. Once the ad has been displayed the desired number of times, display of the advertisement to the viewer is blocked col. 13, lines 40-47; display of the advertisement to the viewer is blocked col. 13, lines 40-47).

As to claim 15, a network adapter (inherently inside the STB) for downloading the stored data into said banner storage device from an external network (fig. 7, el. 64; col. 8, lines 29-37; fig. 5, el. 84; col. 15, lines 17-34; fig. 4, el. 62, col. 8, lines 1-11).

3. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over over Zigmond (U.S. 6,698,020) and Neel (U.S. 5,838,314) in view of Gupta (US 2004/0073947) and Dimitrova (US 6,469,749)

As to claims 9 and 10, Zigmond fails to specifically teach initializing a counter to a predetermined value; incrementing the counter by an amount corresponding to an amount of time that the step of outputting the plurality of the advertisement messages and the received video data is being performed; decrementing the counter by an amount corresponding to an amount of time that the step of outputting the additional video without outputting the plurality of the advertisement messages is being performed; and when the counter reaches the predetermined value, discontinuing the step of outputting the additional video without outputting the plurality of the advertisement messages.

In an analogous art, Gupta discloses:

initializing a counter to a predetermined value (counter resets to zero [0074]);

incrementing the counter by an amount corresponding to an amount of time that the step of outputting the plurality of the advertisement messages and the received video data is being performed ([0074]; [0078]; [0085]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Zigmond's system to teach performing the limiting step by: initializing a counter to a predetermined value; incrementing the counter by an amount corresponding to an amount of time that the step of outputting the plurality of the advertisement messages and the received video data is being performed, as taught by Gupta, so as to allow monitoring of media and determine which information to output.

Zigmond fails to specifically disclose: decrementing the counter by an amount corresponding to an amount of time; and when the counter reaches the predetermined value, discontinuing the step of outputting the advertisement messages.

In an analogous art, Dimitrova discloses a system of decrementing the counter by an amount corresponding to an amount of time; and when the counter reaches the predetermined value, discontinuing outputting the advertisement messages (the commercial is eventually "forgotten" by the system; col. 7, lines 8-19).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Zigmond in view of Gupta system to teach decrementing the counter by an amount corresponding to an amount of time; and when the counter reaches the

predetermined value, discontinuing outputting the advertisement messages, as taught by Dimitrova, so as to allow the system to determine how long to allow the commercial to air.

As to claim 11, Gupta discloses providing the counter as a component of the digital television receiver (fig. 2, el. 180; [0074]).

4. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over over Zigmond (U.S. 6,698,020), Neel (U.S. 5,838,314), and Knudson (U.S. 7,039,935) in view of Gupta (US 2004/0073947) and Dimitrova (US 6,469,749)

As to claim 14, Zigmond discloses that said video reconstruction unit is outputting the information representing the selected program without the rendered data (col. 18, line 38 to col. 19, line 9).

Zigmond fails to teach a counter having a value that is incremented.

In an analogous art, Gupta discloses a system of a counter having a value that is incremented ([0074]; [0078]; [0085]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined system Zigmond and Kim to a counter having a value that is incremented, as taught by Gupta, so as to allow monitoring of media and determine which information to output.

Zigmond fails to specifically disclose that said value of said counter being decremented in proportion to an amount of time during and when the value of said counter reaches a predetermined lower limit value, said video reconstruction unit being prohibited from outputting the information.

In an analogous art, Dimitrova discloses a system said value of said counter being decremented in proportion to an amount of time during and when the value of said counter reaches a predetermined lower limit value, said video reconstruction unit being prohibited from outputting the information (the commercial is eventually "forgotten" by the system; col. 7, lines 8-19).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Zigmond in view of Gupta system to teach decrementing the counter by an amount corresponding to an amount of time; and when the counter reaches the predetermined value, discontinuing outputting the advertisement messages, as taught by Dimitrova, so as to allow the system to determine how long to allow the commercial to air.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy R. Newlin whose telephone number is (571) 270-3015. The examiner can normally be reached on M-F, 8-5 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Annan Q Shang/
Primary Examiner, Art Unit 2623

TRN